Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 2022-12-16 Revision date: 2022-12-16 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Trade name : CRM-dcGTX2&3-d

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Certified Calibration Solution for Decarbamoylgonyautoxins-2 and -3, for

National Research

Council Canada

Conseil national de

recherches Canada

laboratory use only

1.3. Details of the supplier of the safety data sheet

National Research Council Canada

1411 Oxford Street

Halifax, Nova Scotia, Canada B3H 3Z1

T 1-902-426-8281

1.4. Emergency telephone number

Emergency number : CANUTEC 1-613-996-6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS classification

Not classified

2.2. Label elements

GHS labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% By Weight
Water	(CAS-No.) 7732-18-5	99.99
Decarbamoylgonyautoxin-2 (dcGTX2)	(CAS-No.) 86996-87-4*	0.0038
Hydrochloric acid	(CAS-No.) 7647-01-0	0.0018
Decarbamoylgonyautoxin-3 (dcGTX3)	(CAS-No.) 87038-53-7*	0.00074

^{*}CAS No. for free base form



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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical advice/attention if you feel

unwell.

First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical

attention if irritation persists.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by

mouth to an unconscious person. Get medical advice/attention if you feel

unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or

cracking.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess

blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or

vomiting. If sufficient quantities are ingested, gonyautoxins such as dcGTX2 and dcGTX3 causes paresthesia (numbness), paralysis, and in extreme

cases, respiratory arrest.

Other symptoms : The toxicological properties of paralytic shellfish toxins such as dcGTX2 and

dcGTX3 have not been thoroughly investigated.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of

carbon.

5.3. Advice for firefighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear)

and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other

appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective

equipment.



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Methods for cleaning up

: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray, vapours. Do not swallow. When using do not eat, drink or smoke.

Handle and open container with care.

Hygiene measures

: Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep out of the reach of children. Keep container tightly closed. Store in the dark in a freezer at -12°C / 10.4°F or below.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrochloric acid (7647-01-0)		
ACGIH	ACGIH OEL C [ppm]	2 ppm
ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
IDLH	IDLH [ppm]	50 ppm
NIOSH	NIOSH REL C	7 mg/m³
NIOSH	NIOSH REL C [ppm]	5 ppm

Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Decarbamoylgonyautoxin-2 (dcGTX2) (86996-87-4)		
ACGIH	Not applicable	
OSHA	Not applicable	
IDLH	Not applicable	
NIOSH	Not applicable	

Decarbamoylgonyautoxin-3 (dcGTX3) (87038-53-7)		
ACGIH	Not applicable	
OSHA	Not applicable	
IDLH	Not applicable	
NIOSH	Not applicable	

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8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Wear suitable gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected

respirator.

Environmental exposure controls : Avoid release to the environment.

Other information : Handle in accordance with good industrial hygiene and safety procedures. Do

not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid.

Colour : Colourless
Odour : Odourless

Odour threshold : No data available

pH : 3.5

Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Relative evaporation rate (butyl : No data available

acetate=1)

Flammability : Not flammable
Vapour pressure : No data available
Relative vapour density at 20°C : No data available

Relative density : 1.0 g/mL

: No data available Solubility Partition coefficient n-octanol/water : No data available Auto-ignition temperature : No data available : No data available Decomposition temperature Viscosity, kinematic : No data available : No data available Viscosity, dynamic : No data available **Explosive limits** : No data available Explosive properties Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.



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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Hydrochloric acid (7647-01-0)	
LD50 oral rat	238 – 277 mg/kg
LD50 dermal rabbit	> 5010 mg/kg
Water (7732-18-5)	
LD50 oral rat	> 90 mL/kg
Skin corrosion/irritation	: Based on available data, the classification criteria are not met. pH: 3.5
Serious eye damage/irritation	: Based on available data, the classification criteria are not met. pH: 3.5
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.

Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Hydrochloric acid (7647-01-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

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Symptoms/effects after ingestion : May be harmful if swallowed. May cause stomach distress, nausea or

vomiting. If sufficient quantities are ingested, gonyautoxins such as dcGTX2 and dcGTX3 causes paresthesia (numbness), paralysis, and in extreme

cases, respiratory arrest.

Other symptoms : The toxicological properties of paralytic shellfish toxins such as dcGTX2 and

dcGTX3 have not been thoroughly investigated.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

CRM-dcGTX2&3-d	
Persistence and degradability	Not established

12.3. Bioaccumulative potential

CRM-dcGTX2&3-d	
Bioaccumulative potential	Not established

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. The generation of waste should be avoided or minimized wherever possible. Recycle empty containers where allowed.

SECTION 14: Transport information

Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG/IMDG/IATA

Not regulated for transport

Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Decarbamoylgonyautoxin-2 (dcGTX2)	CAS-No. 86996-87-4	0.0038% by weight
Decarbamoylgonyautoxin-3 (dcGTX3)	CAS-No. 87038-53-7	0.00074% by weight



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All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories except for:

Decarbamoylgonyautoxin-2 (dcGTX2)	CAS-No. 86996-87-4	< 1%
Decarbamoylgonyautoxin-3 (dcGTX3)	CAS-No. 87038-53-7	< 1%

Hydrochloric acid (7647-01-0)		
Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	5000 lb	
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)	
SARA Section 313 - Emission Reporting	1 %	

15.2 US State regulations

No additional information available

SECTION 16: Other information

Issue date : 2022-12-16
Revision date : 2022-12-16
Other information : None.
Version # : 1.0

Prepared by : Nexreg Compliance Inc.

DISCLAIMER:

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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